That which is claimed is:

1. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm, wherein the monolithic structural catalyst body has a hydraulic diameter greater than or equal to 75 mm, and a transverse compressive strength of at least 1.5 kg/cm^2.

2. The monolithic structural catalyst body of claim 1, wherein the monolithic structural catalyst body has a macroporosity greater than or equal to 0.05 cc/g in pores of diameter ranging from 600 to 5,000 Angstroms.

3. The monolithic structural catalyst body of claim 2 further comprising a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group.

4. The monolithic structural catalyst body of claim 1, wherein the monolithic structural catalyst body comprises a plurality of inner partition walls having an average thickness from 0.05 mm to 0.22 mm.

5. The monolithic structural catalyst body of claim 4, wherein the average thickness of the inner partition walls ranges from 0.05 mm to 0.20 mm.

6. The monolithic structural catalyst body of claim 5, wherein the average thickness of the inner partition walls ranges from 0.10 mm to 0.18 mm.

7. The monolithic structural catalyst body of claim 1, wherein the hydraulic diameter is greater than or equal to 100 mm.

8. The monolithic structural catalyst body of claim 7, wherein the hydraulic diameter is greater than or equal to 150 mm.

9. The monolithic structural catalyst body of claim 1, wherein the transverse compressive strength is greater than 3 kg/cm^2.

10. The monolithic structural catalyst body of claim 9, wherein the transverse compressive strength in greater than 4 kg/cm^2.

11. The monolithic structural catalyst body of claim 1, wherein the monolithic structural catalyst body has a defect level of 2% or less.

12. The monolithic structural catalyst body of claim 1, wherein the monolithic structural catalyst body has a defect level 0.3% or less.

13. The monolithic structural catalyst body of claim 2, wherein the monolithic structural catalyst body has a defect level of 2% or less.

14. The monolithic structural catalyst body of claim 2, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

15. The monolithic structural catalyst body of claim 3, wherein the monolithic structural catalyst body has a defect level of 2% or less.

16. The monolithic structural catalyst body of claim 3, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

17. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm; and

a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group;

wherein the monolithic structural catalyst body has a macroporosity greater than or equal to 0.05 cc/g in pores of diameter ranging from 600 to 5,000 Angstroms.

18. The monolithic structural catalyst body of claim 17, wherein the monolithic structural catalyst body has a hydraulic diameter of greater than or equal to 75 mm.

19. The monolithic structural catalyst body of claim 17, wherein the monolithic structural catalyst body has a transverse compressive strength of at least 1.5 kg/cm^2.

20. The monolithic structural catalyst body of claim 17, wherein the monolithic structural body comprises a plurality of inner partition walls having an average thickness from 0.05 mm to 0.22 mm.

21. The monolithic structural catalyst body of claim 20, wherein the average thickness of the inner partition walls ranges from 0.05 mm to 0.20 mm.

22. The monolithic structural catalyst body of claim 21, wherein the average thickness of the inner partition walls ranges from 0.10 mm to 0.18 mm.

23. The monolithic structural catalyst body of claim 18, wherein the hydraulic diameter is greater than or equal to 100 mm.

24. The monolithic structural catalyst body of claim 23, wherein the hydraulic diameter is greater than or equal to 150 mm.

25. The monolithic structural catalyst body of claim 19, wherein the transverse compressive strength is greater than 3 kg/cm^2.

26. The monolithic structural catalyst body of claim 25, wherein the transverse compressive strength is greater than 4 kg/cm^2.

27. The monolithic structural catalyst body of claim 17, wherein the monolithic structural catalyst body has a defect level of 2% or less.

28. The monolithic structural catalyst body of claim 17, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

29. The monolithic structural catalyst body of claim 18, wherein the monolithic structural catalyst body has a defect level of 2% or less.

30. The monolithic structural catalyst body of claim 18, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

31. The monolithic structural catalyst body of claim 19, wherein the monolithic structural catalyst body has a defect level of 2% or less.

32. The monolithic structural catalyst body of claim 19, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

33. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm;

wherein the monolithic structural catalyst body has a hydraulic diameter greater than or equal to 75 mm and a macroporosity greater than or equal to 0.05 cc/g in pores of diameter ranging from 600 to 5,000 Angstroms.

34. The monolithic structural catalyst body of claim 33, wherein the monolithic structural body comprises a plurality of inner partition walls having an average thickness from 0.05 mm to 0.22 mm.

35. The monolithic structural catalyst body of claim 34, wherein the average thickness of the inner partition walls ranges from 0.05 mm to 0.20 mm.

36. The monolithic structural catalyst body of claim 35, wherein the average thickness of the inner partition walls ranges from 0.10 mm to 0.18 mm.

37. The monolithic structural catalyst body of claim 33, wherein the hydraulic diameter is greater than or equal to 100 mm.

38. The monolithic structural catalyst body of claim 37, wherein the hydraulic diameter is greater than or equal to 150 mm.

39. The monolithic structural catalyst body of claim 33, wherein the monolithic structural catalyst body has a defect level of 2% or less.

40. The monolithic structural catalyst body of claim 33, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

41. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm; and

a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group;

wherein the monolithic structural catalyst body has a hydraulic diameter greater than or equal to 75 mm.

42. The monolithic structural catalyst body of claim 41, wherein the monolithic structural catalyst body has a transverse compressive strength of at least 1.5 kg/cm^2.

43. The monolithic structural catalyst body of claim 41, wherein the monolithic structural body comprises a plurality of inner partition walls having an average thickness from 0.05 mm to 0.22 mm.

44. The monolithic structural catalyst body of claim 43, wherein the average thickness of the inner partition walls ranges from 0.05 mm to 0.20 mm.

45. The monolithic structural catalyst body of claim 44, wherein the average thickness of the inner partition walls ranges from 0.10 mm to 0.18 mm.

46. The monolithic structural catalyst body of claim 42, wherein the transverse compressive strength is greater than 3 kg/cm^2.

47. The monolithic structural catalyst body of claim 46, wherein the transverse compressive strength is greater than 4 kg/cm^2.

48. The monolithic structural catalyst body of claim 41, wherein the monolithic structural catalyst body has a defect level of 2% or less.

49. The monolithic structural catalyst body of claim 41, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

50. The monolithic structural catalyst body of claim 42, wherein the monolithic structural catalyst body has a defect level of 2% or less.

51. The monolithic structural catalyst body of claim 42, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

52. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm; and

a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group;

wherein the monolithic structural catalyst body has a transverse compressive strength of at least 1.5 kg/cm^2.

53. The monolithic structural catalyst body of claim 52, wherein the monolithic structural body comprises a plurality of inner partition walls having an average thickness from 0.05 mm to 0.22 mm.

54. The monolithic structural catalyst body of claim 53, wherein the average thickness of the inner partition walls ranges from 0.05 mm to 0.20 mm.

55. The monolithic structural catalyst body of claim 54, wherein the average thickness of the inner partition walls ranges from 0.10 mm to 0.18 mm.

56. The monolithic structural catalyst body of claim 52, wherein the transverse compressive strength is greater than 3 kg/cm^2.

57. The monolithic structural catalyst body of claim 56, wherein the transverse compressive strength is greater than 4 kg/cm^2.

58. The monolithic structural catalyst body of claim 52, wherein the monolithic structural catalyst body has a defect level of 2% or less.

59. The monolithic structural catalyst body of claim 52, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

60. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm;

wherein the monolithic structural catalyst body has a transverse compressive strength of at least 1.5 kg/cm^2 and a macroporosity of greater than or equal to 0.05 cc/g in pores of diameter ranging from 600 to 5,000 Angstroms.

61. The monolithic structural catalyst body of claim 60, wherein the monolithic structural body comprises a plurality of inner partition walls having an average thickness from 0.05 mm to 0.22 mm.

62. The monolithic structural catalyst body of claim 61, wherein the average thickness of the inner partition walls ranges from 0.05 mm to 0.20 mm.

63. The monolithic structural catalyst body of claim 62, wherein the average thickness of the inner partition walls ranges from 0.10 mm to 0.18 mm.

64. The monolithic structural catalyst body of claim 60, wherein the transverse compressive strength is greater than 3 kg/cm^2.

65. The monolithic structural catalyst body of claim 60, wherein the transverse compressive strength is greater than 4 kg/cm^2.

66. The monolithic structural catalyst body of claim 60, wherein the monolithic structural catalyst body has a defect level of 2% or less.

67. The monolithic structural catalyst body of claim 60, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

68. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm, the monolithic structural catalyst body having at least two of the following characteristics:

a hydraulic diameter greater than or equal to 75 mm;

a transverse compressive strength of at least 1.5 kg/cm^2;

a macroporosity greater than or equal to 0.05 cc/g in pores of diameter ranging from 600 to 5,000 Angstroms; or

a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group; and

further comprising additional deposited catalytic material.

69. The monolithic structural catalyst body of claim 1 further comprising additional deposited catalytic material.

70. The monolithic structural catalyst body of claim 17 further comprising additional deposited catalytic material.

71. The monolithic structural catalyst body of claim 33 further comprising additional deposited catalytic material.

72. The monolithic structural catalyst body of claim 41 further comprising additional deposited catalytic material.

73. The monolithic structural catalyst body of claim 52 further comprising additional deposited catalytic material.

74. The monolithic structural catalyst body of claim 60 further comprising additional deposited catalytic material.

75. A monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm, wherein the monolithic structural catalyst body has a hydraulic diameter greater than or equal to 75 mm, a transverse compressive strength of at least 1.5 kg/cm^2, and a uniform chemical

composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group; and

wherein the monolithic structural catalyst body further comprises additional deposited catalytic material.

76. The monolithic structural catalyst body of claim 68, wherein the monolithic structural catalyst body has a defect level of 2% or less.

77. The monolithic structural catalyst body of claim 68, wherein the monolithic structural catalyst body has a defect level of 0.3% or less.

78. A method for reducing the nitrogen dioxide content of a fluid comprising:

flowing the fluid through a monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm;

wherein the monolithic structural catalyst body has at least two of the following characteristics:

a hydraulic diameter greater than or equal to 75 mm;

a transverse compressive strength of at least 1.5 kg/cm^2;

a macroporosity greater than or equal to 0.05 cc/g in pores of diameter ranging from 600 to 5,000 Angstroms; or

a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group.

79. A method of reducing the nitrogen dioxide content of a fluid comprising:

flowing the fluid through a monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm;

wherein the monolithic structural catalyst body has at least two of the following characteristics:

a hydraulic diameter greater than or equal to 75 mm;

a transverse compressive strength of at least 1.5 kg/cm^2;

a macroporosity greater than or equal to 0.05 cc/g in pores of diameter ranging from 600 to 5,000 Angstroms; or

a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group; and

further comprising additional deposited catalytic material.

80. A method for reducing the nitrogen dioxide content of a fluid comprising:

flowing the fluid through a monolithic structural catalyst body comprising:

an inner partition wall having an average thickness of less than 0.22 mm, wherein the monolithic structural catalyst body has a hydraulic diameter greater than or equal to 75 mm, a transverse compressive strength of at least 1.5 kg/cm^2, and a uniform chemical composition comprising 50-99.9% by weight an inorganic oxide composition and at least 0.1% by weight a catalytically active metal functional group; and

wherein the monolithic structural catalyst body further comprises additional deposited catalytic material.

81. A method as in any one of claims 78 or 79, wherein the fluid comprises a combustion-flue gas.

82. The method of claim 81, wherein the temperature of the combustion-flue gas ranges from 150°C to 600°C.